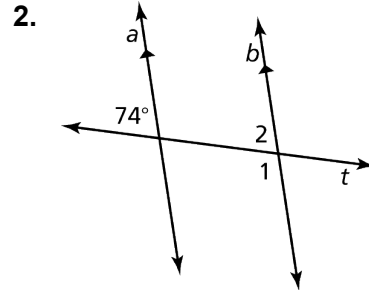
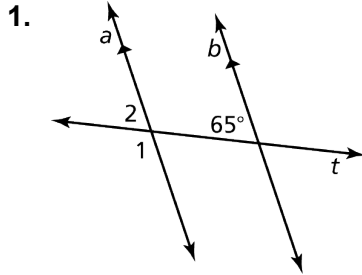
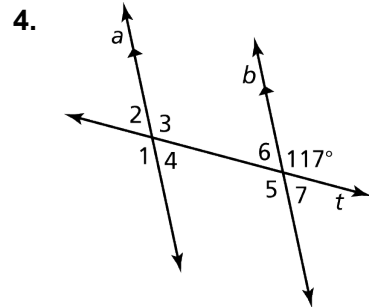
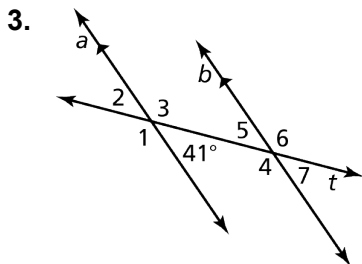


3.1 Practice A

Use the figure to find the measures of the numbered angles.

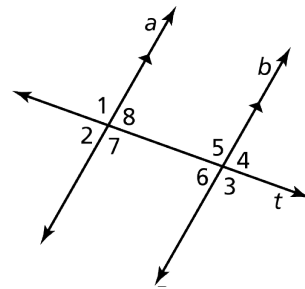


Use the figure to find the measures of the numbered angles. Explain your reasoning.



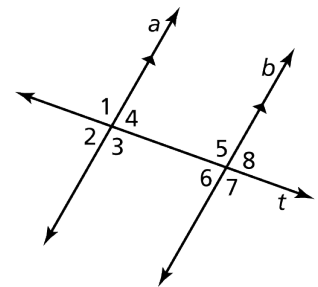
Complete the statement. Explain your reasoning.

5. If the measure of $\angle 1 = 160^\circ$, then the measure of $\angle 5 = \underline{\hspace{1cm}}$.
6. If the measure of $\angle 6 = 37^\circ$, then the measure of $\angle 4 = \underline{\hspace{1cm}}$.
7. If the measure of $\angle 8 = 82^\circ$, then the measure of $\angle 3 = \underline{\hspace{1cm}}$.
8. If the measure of $\angle 4 = 60^\circ$, then the measure of $\angle 5 = \underline{\hspace{1cm}}$.



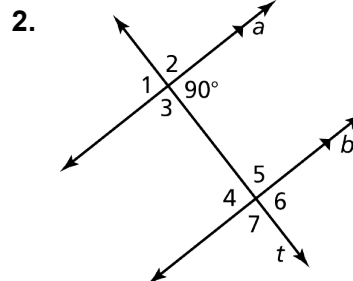
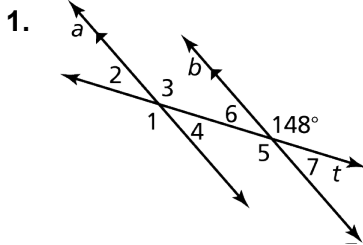
Correct the following statements about the numbered angles by replacing the underlined words with the correct words.

9. $\angle 2$ is congruent to $\angle 4$. $\angle 4$ is congruent to $\angle 8$.
So, $\angle 2$ is supplementary to $\angle 8$.
10. $\angle 6$ is congruent to $\angle 3$. $\angle 3$ is congruent to $\angle 1$.
So, $\angle 6$ is congruent to $\angle 1$.



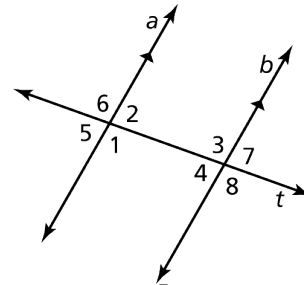
3.1 Practice B

Use the figure to find the measures of the numbered angles. Explain your reasoning.



Complete the statement. Explain your reasoning.

3. If the measure of $\angle 1 = 130^\circ$, then the measure of $\angle 8 = \underline{\quad ? \quad}$.
4. If the measure of $\angle 5 = 53^\circ$, then the measure of $\angle 3 = \underline{\quad ? \quad}$.
5. If the measure of $\angle 7 = 71^\circ$, then the measure of $\angle 3 = \underline{\quad ? \quad}$.
6. If the measure of $\angle 4 = 65^\circ$, then the measure of $\angle 6 = \underline{\quad ? \quad}$.



Using the diagram for angle placement only (the measurement of the angles may change), indicate if the following statements are *always*, *sometimes*, or *never* true. Explain.

7. $\angle 1$ is congruent to $\angle 3$.
8. $\angle 6$ is supplementary to $\angle 8$.
9. $\angle 2$ is complementary to $\angle 1$.
10. $\angle 8$ and $\angle 5$ are vertical angles.
11. $\angle 2$ is congruent to $\angle 8$.
12. If a transversal intersects two parallel lines, is it possible for all of the angles formed to be acute angles? Explain.

